\_\_\_\_\_\_

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2008; month=6; day=23; hr=14; min=55; sec=54; ms=584; ]

\_\_\_\_\_\_

## Validated By CRFValidator v 1.0.3

Application No: 10719695 Version No: 3.0

Input Set:

Output Set:

**Started:** 2008-06-02 10:00:03.033

Finished: 2008-06-02 10:00:03.742

**Elapsed:** 0 hr(s) 0 min(s) 0 sec(s) 709 ms

Total Warnings: 1

Total Errors: 0

No. of SeqIDs Defined: 5

Actual SeqID Count: 5

Error code Error Description

 $\mathbb{W}$  213 Artificial or Unknown found in <213> in SEQ ID (3)

## SEQUENCE LISTING

```
<110> NG, LEONG
<120> BODILY FLUID MARKERS OF TISSUE HYPOXIA
<130> ISA-012.01
<140> 10719695
<141> 2003-11-21
<150> GB 0322390.6
<151> 2003-09-24
<150> GB 0227179.9
<151> 2002-11-21
<160> 5
<170> PatentIn Ver. 3.3
<210> 1
<211> 999
<212> PRT
<213> Homo sapiens
<400> 1
Met Ala Asp Lys Val Arg Arg Gln Arg Pro Arg Arg Arg Val Cys Trp
Ala Leu Val Ala Val Leu Leu Ala Asp Leu Leu Ala Leu Ser Asp Thr
           20
                              25
Leu Ala Val Met Ser Val Asp Leu Gly Ser Glu Ser Met Lys Val Ala
       35
                        40
Ile Val Lys Pro Gly Val Pro Met Glu Ile Val Leu Asn Lys Glu Ser
                       55
    50
Arg Arg Lys Thr Pro Val Ile Val Thr Leu Lys Glu Asn Glu Arg Phe
                    70
                                       75
65
Phe Gly Asp Ser Ala Ala Ser Met Ala Ile Lys Asn Pro Lys Ala Thr
                                   90
Leu Arg Tyr Phe Gln His Leu Leu Gly Lys Gln Ala Asp Asn Pro His
         100
                             105
Val Ala Leu Tyr Gln Ala Arg Phe Pro Glu His Glu Leu Thr Phe Asp
     115 120 125
Pro Gln Arg Gln Thr Val His Phe Gln Ile Ser Ser Gln Leu Gln Phe
   130
                  135
                                         140
Ser Pro Glu Glu Val Leu Gly Met Val Leu Asn Tyr Ser Arg Ser Leu
```

145

150

Ala	Glu	Asp	Phe	Ala 165	Glu	Gln	Pro	Ile	Lys 170	Asp	Ala	Val	Ile	Thr 175	Val
Pro	Val	Phe	Phe 180	Asn	Gln	Ala	Glu	Arg 185	Arg	Ala	Val	Leu	Gln 190	Ala	Ala
Arg	Met	Ala 195	Gly	Leu	Lys	Val	Leu 200	Gln	Leu	Ile	Asn	Asp 205	Asn	Thr	Ala
Thr	Ala 210	Leu	Ser	Tyr	Gly	Val 215	Phe	Arg	Arg	Lys	Asp 220	Ile	Asn	Thr	Thr
Ala 225	Gln	Asn	Ile	Met	Phe 230	Tyr	Asp	Met	Gly	Ser 235	Gly	Ser	Thr	Val	Cys 240
Thr	Ile	Val	Thr	Tyr 245	Gln	Met	Val	Lys	Thr 250	Lys	Glu	Ala	Gly	Met 255	Gln
Pro	Gln	Leu	Gln 260	Ile	Arg	Gly	Val	Gly 265	Phe	Asp	Arg	Thr	Leu 270	Gly	Gly
Leu	Glu	Met 275	Glu	Leu	Arg	Leu	Arg 280	Glu	Arg	Leu	Ala	Gly 285	Leu	Phe	Asn
Glu	Gln 290	Arg	Lys	Gly	Gln	Arg 295	Ala	Lys	Asp	Val	Arg 300	Glu	Asn	Pro	Arg
Ala 305	Met	Ala	Lys	Leu	Leu 310	Arg	Glu	Ala	Asn	Arg 315	Leu	Lys	Thr	Val	Leu 320
Ser	Ala	Asn	Ala	Asp 325	His	Met	Ala	Gln	Ile 330	Glu	Gly	Leu	Met	Asp 335	Asp
Val	Asp	Phe	Lys 340	Ala	Lys	Val		Arg 345	Val	Glu	Phe	Glu	Glu 350	Leu	Суз
Ala	Asp	Leu 355	Phe	Glu	Arg	Val	Pro 360	Gly	Pro	Val	Gln	Gln 365	Ala	Leu	Gln
Ser	Ala 370	Glu	Met	Ser	Leu	Asp 375	Glu	Ile	Glu	Gln	Val 380	Ile	Leu	Val	Gly
Gly 385	Ala	Thr	Arg	Val	Pro 390	Arg	Val	Gln	Glu	Val 395	Leu	Leu	Lys	Ala	Val 400
Gly	Lys	Glu	Glu	Leu 405	Gly	Lys	Asn	Ile	Asn 410	Ala	Asp	Glu	Ala	Ala 415	Ala
Met	Gly	Ala	Val 420	Tyr	Gln	Ala	Ala	Ala 425	Leu	Ser	Lys	Ala	Phe 430	Lys	Val
Lys	Pro	Phe 435	Val	Val	Arg	Asp	Ala 440	Val	Val	Tyr	Pro	Ile 445	Leu	Val	Glu
Phe	Thr	Arg	Glu	Val	Glu	Glu	Glu	Pro	Gly	Ile	His	Ser	Leu	Lys	His

Asn 465	Lys	Arg	Val	Leu	Phe 470	Ser	Arg	Met	Gly	Pro 475	Tyr	Pro	Gln	Arg	Lys 480
Val	Ile	Thr	Phe	Asn 485	Arg	Tyr	Ser	His	Asp 490	Phe	Asn	Phe	His	Ile 495	Asn
Tyr	Gly	Asp	Leu 500	Gly	Phe	Leu	Gly	Pro 505	Glu	Asp	Leu	Arg	Val 510	Phe	Gly
Ser	Gln	Asn 515	Leu	Thr	Thr	Val	Lys 520	Leu	Lys	Gly	Val	Gly 525	Asp	Ser	Phe
Lys	Lys 530	Tyr	Pro	Asp	Tyr	Glu 535	Ser	Lys	Gly	Ile	Lys 540	Ala	His	Phe	Asn
Leu 545	Asp	Glu	Ser	Gly	Val 550	Leu	Ser	Leu	Asp	Arg 555	Val	Glu	Ser	Val	Phe 560
Glu	Thr	Leu	Val	Glu 565	Asp	Ser	Ala	Glu	Glu 570	Glu	Ser	Thr	Leu	Thr 575	Lys
Leu	Gly	Asn	Thr 580	Ile	Ser	Ser	Leu	Phe 585	Gly	Gly	Gly	Thr	Thr 590	Pro	Asp
Ala	Lys	Glu 595	Asn	Gly	Thr	Asp	Thr 600	Val	Gln	Glu	Glu	Glu 605	Glu	Ser	Pro
Ala	Glu 610	Gly	Ser	Lys	Asp	Glu 615	Pro	Gly	Glu	Gln	Val 620	Glu	Leu	Lys	Glu
Glu 625	Ala	Glu	Ala	Pro	Val 630	Glu	Asp	Gly	Ser	Gln 635	Pro	Pro	Pro	Pro	Glu 640
Pro	Lys	Gly	Asp	Ala 645	Thr	Pro	Glu	_		Lys		Thr	Glu	Lys 655	Glu
Asn	Gly	Asp	Lys 660	Ser	Glu	Ala	Gln	Lys 665	Pro	Ser	Glu	Lys	Ala 670	Glu	Ala
Gly	Pro	Glu 675	Gly	Val	Ala	Pro	Ala 680	Pro	Glu	Gly	Glu	Lys 685	Lys	Gln	Lys
	690	,	Lys	,	,	695					700				
Val 705	Leu	Asp	Leu	Pro	710	Leu	Pro	Glu	Asp	Lys 715	Leu	Ala	Gln	Ser	Val 720
Gln	Lys	Leu	Gln	Asp 725	Leu	Thr	Leu	Arg	Asp 730	Leu	Glu	Lys	Gln	Glu 735	Arg
Glu	Lys	Ala	Ala 740	Asn	Ser	Leu	Glu	Ala 745	Phe	Ile	Phe	Glu	Thr 750	Gln	Asp
Lys	Leu	Tyr 755	Gln	Pro	Glu	Tyr	Gln 760	Glu	Val	Ser	Thr	Glu 765	Glu	Gln	Arg

Glu Glu Ile Ser Gly Lys Leu Ser Ala Ala Ser Thr Trp Leu Glu Asp 775 Glu Gly Val Gly Ala Thr Thr Val Met Leu Lys Glu Lys Leu Ala Glu 790 795 785 Leu Arg Lys Leu Cys Gln Gly Leu Phe Phe Arg Val Glu Glu Arg Lys 810 Lys Trp Pro Glu Arg Leu Ser Ala Leu Asp Asn Leu Leu Asn His Ser 825 820 Ser Met Phe Leu Lys Gly Ala Arg Leu Ile Pro Glu Met Asp Gln Ile 840 Phe Thr Glu Val Glu Met Thr Thr Leu Glu Lys Val Ile Asn Glu Thr 850 855 860 Trp Ala Trp Lys Asn Ala Thr Leu Ala Glu Gln Ala Lys Leu Pro Ala 870 875 865 Thr Glu Lys Pro Val Leu Leu Ser Lys Asp Ile Glu Ala Lys Met Met 885 890 Ala Leu Asp Arg Glu Val Gln Tyr Leu Leu Asn Lys Ala Lys Phe Thr 905 900 Lys Pro Arg Pro Arg Pro Lys Asp Lys Asn Gly Thr Arg Ala Glu Pro 920 Pro Leu Asn Ala Ser Ala Ser Asp Gln Gly Glu Lys Val Ile Pro Pro 930 935 Ala Gly Gln Thr Glu Asp Ala Glu Pro Ile Ser Glu Pro Glu Lys Val 945 950 955 960 Glu Thr Gly Ser Glu Pro Gly Asp Thr Glu Pro Leu Glu Leu Gly Gly 965 970 Pro Gly Ala Glu Pro Glu Gln Lys Glu Gln Ser Thr Gly Gln Lys Arg 985 980 990

Pro Leu Lys Asn Asp Glu Leu 995

<210> 2

<211> 13

<212> PRT

<213> Homo sapiens

<400> 2

Leu Ala Val Met Ser Val Asp Leu Gly Ser Glu Ser Met

10

```
<210> 3
<211> 14
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic
     peptide
<400> 3
Cys Leu Ala Val Met Ser Val Asp Leu Gly Ser Glu Ser Met
    5
                                   10
<210> 4
<211> 32
<212> PRT
<213> Homo sapiens
<400> 4
His Pro Leu Gly Ser Pro Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly
                                    10
Leu Gln Glu Gln Arg Asn His Leu Gln Gly Lys Leu Ser Glu Leu Gln
                                25
<210> 5
<211> 76
<212> PRT
<213> Homo sapiens
<400> 5
Val Glu Gln Thr Ser Leu Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr
Gly Val Trp Lys Ser Arg Glu Val Ala Thr Glu Gly Ile Arg Gly His
           20
                               25
Arg Lys Met Val Leu Tyr Thr Leu Arg Ala Pro Arg Ser Pro Lys Met
       35
Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp Arg Ile Ser Ser
     50
                       55
Ser Ser Gly Leu Gly Cys Lys Val Leu Arg Arg His
```

65

70